Oregon’s HBV Vaccination Collaboration

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HBV Vaccine Collaboration History

• Collaboration between
  – OHA Immunization Program
  – OHA Viral Hepatitis Prevention Coordinator
  – Oregon Department of Corrections

• 2003-2004 – HBV vaccine first provided to ODOC

• 2007-2010 – CDC 317 funds and ODOC purchased HAV/HBV vaccine
  – All sites brought into VFC/317 compliance
  – Site data collected via hard copy form
  – 22,480 doses ordered and 23,131 doses administered

• 2012-2015 – CDC Immunization funds
  – No-cost extension 2014-2015
OR Adult Hepatitis B Vaccination Project: Population Information

- 16 settings, statewide
- >14,000 adult male and female inmates
- >400 inmates/month complete sentences and release to community
Goal and Activities

• Goal: HBV vaccine coverage of 85% among eligible, incoming persons to ODOC.

• Key Activities
  – System level
    • VFC/317 Certification
    • Revised nurse treatment protocols for HBV vaccine
  – Site level
    • A minimum of two ODOC staff at each site trained on ALERT IIS system (exception for sites with one or less nursing position FTE)
    • Training formats: Webinars, video conferencing and in-person
    • Ongoing technical assistance for vaccine management and administration
      * Technical assistance now folded into VFC/317 program
Key Activities

• Key Activities (continued)
  – Individual Level

  • HBV vaccine offered to persons at ODOC entry – in writing within intake packet, at HIV/VH/STI health education class, and by health clinic nurses

  • If person interested in HBV vaccine, protocol was to
    – Determine HBV vaccine status eligibility,
    – If eligible start or complete HBV vaccination series and
    – If needed schedule remaining doses
    – Document HBV vaccine informed consent and vaccine administration record (VAR) in inmate patient medical file and in ALERTIIS
Evaluation

• Estimate HBV vaccination status among sample of incoming inmates over three year time period
  – 7/1/2009 and 6/30/2010
  – 7/1/2012 and 6/30/2013
  – 7/1/2013 and 6/30/2014

• Characterize the individuals who received HBV vaccination(s) while incarcerated within ODOC

• Document the HBV vaccination informed consent process within the ODOC

• Quantify associations between HBV vaccination and the following opportunities: (a) influenza vaccination and (b) pneumonia vaccination.
### HBV Vaccination Doses reported in ALERTIIS, Period: 10/1/2012 to 9/30/2015

<table>
<thead>
<tr>
<th>Dose</th>
<th>CDC Purchased HBV Vaccine</th>
<th>ODOC Purchased HBV Vaccine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose 1</td>
<td>1,438</td>
<td>1,211</td>
<td>2,649</td>
</tr>
<tr>
<td>Dose 2</td>
<td>1,542</td>
<td>1,389</td>
<td>2,931</td>
</tr>
<tr>
<td>Dose 3</td>
<td>1,511</td>
<td>1,636</td>
<td>3,147</td>
</tr>
<tr>
<td>Dose 4</td>
<td>30</td>
<td>33</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>4,521</td>
<td>4,269</td>
<td>6,405</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Group</th>
<th>CDC Purchased HBV Vaccine</th>
<th>ODOC Purchased HBV Vaccine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24 yrs. of age</td>
<td>382</td>
<td>589</td>
<td>971</td>
</tr>
<tr>
<td>25-44 yrs. of age</td>
<td>2,909</td>
<td>3,161</td>
<td>6,070</td>
</tr>
<tr>
<td>45-64 yrs. of age</td>
<td>1,302</td>
<td>1,159</td>
<td>2,461</td>
</tr>
<tr>
<td>65+ yrs. of age</td>
<td>135</td>
<td>89</td>
<td>224</td>
</tr>
<tr>
<td>Total</td>
<td>4,728</td>
<td>4,998</td>
<td>9,726</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>CDC Purchased HBV Vaccine</th>
<th>ODOC Purchased HBV Vaccine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4,215</td>
<td>4,366</td>
<td>8,581</td>
</tr>
<tr>
<td>Female</td>
<td>489</td>
<td>606</td>
<td>1,095</td>
</tr>
<tr>
<td>Unknown</td>
<td>24</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>4,708</td>
<td>4,998</td>
<td>9,726</td>
</tr>
</tbody>
</table>

129 ODOC staff members completed ALERT IIS training.
Preliminary HBV Vaccination Finding

HBV dose eligibility, completion and coverage

Chart extraction period 7/1/2012-6/30/2014

- 66% of incoming persons were determined eligible for HBV vaccine through the ODOC medical intake process
- 34% of incoming persons, determined HBV vaccine eligible by ODOC, received at least one HBV dose during the incarceration time period
- 24% of incoming persons, determined HBV vaccine eligible by ODOC, received three or more HBV doses during the incarceration time period
- The HBV vaccination coverage level within the ODOC between 7/1/2012 and 6/30/2014 was 57% (at least one HBV dose), and 50% (at least 3 HBV doses)

  - In 2009 HBV vaccination rate (at least 1 dose) among high-risk adults in the US was reported 50.5% (at least 1 dose) and series completion rate of 41.2% (at least 3 HBV doses). Lu, P.J., et al., Hepatitis B vaccination coverage among high-risk adults 18-49 years, U.S., 2009. Vaccine, 2011. 29(40): p. 7049-57.
Key Elements

- **Shared Project Vision**
  - Addressed a well-defined public health challenge
  - Significant interest in an interagency collaboration

- **Project was considered "Win-Win" by leadership**
  - Access to population of high-risk individuals (PH)
  - Supervised completion of 3-dose series (PH)
  - Infrastructure and capacity-building (ODOC)
  - Public Health supplied vaccine (ODOC)
Key Elements

■ Project Structure

 Communication plan
   Meetings and progress updates with HAS
   Site level communication

 Implementation plan and activities
   VFC/317 requirements used to guide program structure
     Monthly Vaccine Reports (MVR)
     Vaccine Administration Record (VAR)
   Project specific forms and protocols
   Site-level monitoring and support

 Mindful of post-funding infrastructure
Key Elements

• Start-up takes time
  – Relationship building – make a plan
  – Understand and respect work cultures and priorities
  – Support equipment purchases and training when possible

• Challenges
  – **Maintaining project momentum**
    • Site staff turnover, competing priorities, reporting, site support etc.
    • Champion succession
  – **Funding** – HBV vaccine benefits community health systems
The Oregon HBV Vaccination Project’s efforts within the Oregon Department of Corrections were supported through a cooperative agreement with the Centers for Disease Control and Prevention PPHF 1H23IP000693-01